

Docket No. UCT-0046-P2

AMENDMENTS IN THE SPECIFICATION

Please replace paragraph 14 on Page 6 as follows:

-- The term "glaucoma", as used herein, includes inheritable glaucomas, such as primary congenital or infantile glaucoma; primary open angle glaucoma (POAG), including both juvenile-onset and adult- or late-onset POAG; secondary glaucomas; pigmentary glaucoma; and low tension glaucoma (LTG) (also known as normal tension glaucoma (NTG)/normal pressure glaucoma (NPG)). In particular embodiments, the glaucoma can be primary open angle glaucoma (POAG) or the low tension subgroup of POAG. To the extent that the optineurin gene is implicated, other types of glaucoma are included in this definition including glaucomas ~~occuring in patients with sporadic glaucoma associated with sporadic mutations.~~ An "increased risk" of glaucoma, as used herein, refers to a likelihood of an individual for developing glaucoma, that is greater, by an amount that is statistically significant, than the likelihood of another individual or population of individuals for developing glaucoma. The methods of the invention can be used for detection, including screening, prognosis and diagnosis, of at-risk individuals and/or populations for glaucoma or the risk of glaucoma.--

Please insert the following paragraphs after Page 6, paragraph 14.

--As used herein, the term "detection" encompasses methods of screening, diagnosis and prognosis of glaucoma. The term "screening" refers to identification of the presence or absence of mutations in an optineurin gene or polypeptide which are associated with glaucoma or an increased risk of glaucoma. The term "diagnosis" refers to determining that a patient is affected with glaucoma by analyzing the signs and symptoms of the disease. In addition to identification of the presence of a mutation in an optineurin gene or polypeptide which is associated with glaucoma, a diagnosis of glaucoma may further include analysis of the family history of the patient and determination of clinical symptoms of glaucoma in the patient. The term "prognosis" refers to predicting a patient's future risk of developing glaucoma, and the future course of the disease. A patient with a mutation in an optineurin gene or polypeptide which is associated with glaucoma may be at higher risk for developing glaucoma in the future than a patient with no such mutations.

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As used herein, "treatment" refers to ameliorating the symptoms of glaucoma, preventing or delaying the onset of glaucoma, and/or lessening the severity and/or frequency of symptoms associated with glaucoma. Treatment of glaucoma thus refers to treatment after the appearance of the symptoms of glaucoma as well as prophylactic treatment.--

Please replace paragraph 24 on Page 10 as follows:

--The presence or absence of the alteration can be indicated by hybridization of the gene in the genomic DNA, RNA, or cDNA to a nucleic acid probe. A "nucleic acid probe", as used herein, is a single-stranded polynucleotide which hybridizes to the gene of interest (optineurin). The probe can comprise a portion of SEQ ID NO: 1, 3, or 5, preferably a contiguous portion, or a complement thereof. A nucleic acid probe can be an oligonucleotide of about 15 to about 30 nucleotides or a piece of nucleic acid which may be several hundred kb long. Short probes generally require cooler temperatures to form sufficiently stable hybrid complexes with the template. The nucleic acid probe can be a DNA probe or an RNA probe; the nucleic acid probe contains at least one alteration in the optineurin gene. The probe can comprise the entire gene, a gene fragment, a vector comprising the gene, an exon of the gene, or a portion of nucleic acid which may be several hundred kilobases long, etc. Preferred nucleic acid probes are those comprising an alteration in the optineurin gene.--

Please replace paragraph 75 on Page 28 as follows:

--An "optineurin therapeutic agent" is an agent used for the treatment of glaucoma, that alters (e.g., enhances or inhibits) optineurin polypeptide activity and/or optineurin gene expression (e.g., an optineurin agonist or antagonist). The therapy is designed to inhibit, alter, replace or supplement activity of the mutant optineurin polypeptide in an individual, or to inhibit, alter, replace or supplement activity of an optineurin-interacting polypeptide in an individual.--